

ABSTRACT

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

Methods are provided for the enhanced delivery of an antigen to antigen-presenting cells such as dendritic cells by conjugating an antigen to a molecule targeted to an endocytic receptor on the dendritic cell, such as DEC-205. The molecule targeted to an endocytic receptor may be a natural ligand to the receptor or an antibody thereto. Conjugates may be covalent complexes or single-chain polypeptides. Together with modulation of the maturation of the dendritic cell, an enhanced immune response or tolerizing immune response may be generated to the antigen. In addition, conjugate molecules including single-chain polypeptides are provided which contain at least an endocytic receptor-binding molecule and a preselected antigen.